EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 3-05

☐ Other ☐ Amendment Number:

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-D-12-050	08/02/2012 To 08/01/2016 Base Option Period Number 3	3-05 (Steam Electric Eff)

Contractor: Westat, Inc.

Specify Section and paragraph of Contract SOW: 1.1, 1.2, 2.3, 2.4

Purpose:
- [X] Work Assignment
- [ ] Work Assignment Amendment
- [ ] Work Plan Approval
- [ ] Work Assignment Close-Out
- [ ] Incremental Funding

Period of Performance: From 04/29/2016 To 07/29/2016

Comments:
WA 3-05: The Contractor shall adhere to the attached Statement of Work. The Contractor shall not duplicate any previous work on this or any other Contract that has supported the effort described in the SOW>

☐ Superfund — Accounting and Appropriations Data — [X] Non-Superfund

SFO (Max 2): ☐

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Cost/Fee:	LOE:
Contract Period: 08/02/2012 To 08/01/2016		0
This Action:		250
Total:		250

Work Plan / Cost Estimate Approvals

Contractor WP Dated:	Cost/Fee	LOE:
Cumulative Approved:	Cost/Fee	LOE:

Work Assignment Manager Name: Brian Schnitker (Signature) (Date)	Branch/Mail Code: Phone Number: 202-566-0838 FAX Number:
Project Officer Name: Edward Hudgens (Signature) (Date)	Branch/Mail Code: Phone Number: 919-966-0642 FAX Number:
Other Agency Official Name (Signature) (Date)	Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Robin S. Harris Robin S. Harris (Signature) 4/29/16 (Date)	Branch/Mail Code: Phone Number: 919-541-0955 FAX Number:

Performance Work Statement

Westat Contract# EP-D-12-050
Work Assignment 3-05

Title: Litigation Support for Steam Electric Effluent Guidelines

Period of Performance: Issuance through July 31, 2016

Work Assignment Contracting Officer's Representative (WACOR):
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A. Background and Purpose

The steam electric power generating effluent limitations guidelines and standards (ELGs) apply to the electric power plants that generate electricity for distribution and sale from a process utilizing fossil-type fuel (coal, oil, or gas) or nuclear fuel in conjunction with a thermal cycle employing the steam-water system as the thermodynamic medium. The effluent guidelines are codified in the Code of Federal Regulations (CFR) at Title 40, Part 423 (40 CFR Part 423). EPA's most recent revisions to the effluent guidelines for this industry sector were promulgated in 2015 (see 80 Fed. Reg. 67838; November 3, 2015).

The effluent limitations established by the steam electric rule, which were promulgated under the authority of the Clean Water Act (CWA), protect public health from many of the toxic metals and other harmful pollutants, including nutrients, discharged by power plants. Steam electric power plants contribute the greatest amount of all toxic pollutants discharged to surface waters by industrial categories regulated under the CWA. The pollutants discharged by this industry can cause severe health and environmental problems in the form of cancer and non-cancer risks in humans, lowered IQ among children, and deformities and reproductive harm in fish and wildlife.

Many of these pollutants, once in the environment, remain there for years. Due to their close proximity to these discharges and relatively high consumption of fish, some minority and low-income communities have greater exposure to, and are therefore at greater risk from, pollutants in steam electric power plant discharges.

Establishing effluent limitation based on statistical analysis of effluent data drives the installation of pollution controls that yield a range of human health benefits by reducing effluent discharges to surface waters and, as a result, ambient pollutant concentrations in the receiving reaches. Recreational anglers and subsistence fishers (and their household members) who consume fish caught in the reaches receiving steam electric discharges are expected to benefit from reduced pollutant concentrations in fish tissue. Examples of human health benefits from reduced exposure to steam electric pollutants via the fish consumption pathway include:

- Reduced exposure to lead:
    - Avoided neurological and cognitive damages in children (ages 0-7) based on the impact of an additional IQ point on an individual's future earnings and the cost of compensatory education for children with learning delays
    - Reduced incidence of cardiovascular disease in adults
- Reduced exposure to mercury, leading to reduced neurological and cognitive damages in infants from exposure to mercury *in-utero*
- Reduced exposure to arsenic, leading to reduced incidence of cancer cases
- Reduced exposure to cadmium and selenium, leading to reduced incidence of kidney damage
- Reduced exposure to zinc, thallium, or boron, leading to reduced incidence of gastrointestinal problems.

These protective measures are also a feature of the Office of Research and Development's Safe, Sustainable Water Resources program.

Under this work assignment, the contractor shall provide technical support in defending the steam electric rule against legal challenges. Other tasks under this work assignment include support in responding to requests for records under the Freedom of Information Act and evaluation of data submitted in regard to industry requests for fundamentally different factors (FDF) variances.

B. General Requirements

In providing support under the tasks described in Section C, the contractor also shall adhere to the following general requirements:

Databases and Computer programs (PWS 2.3)

The contractor shall ensure that the updated databases, computer programs and the corresponding documentation developed under this contract are accessible to the EPA. The contractor shall use software packages that are relevant to particular statistical analysis, generally acceptable by experts as being reliable for the statistical analysis, and allow for any necessary

data modification. The program shall identify the origin of the input data sets (e.g., version X supplied by EPA on specific date). (See PWS 2.3).

Deliverables (PWS 2.3)

The contractor shall provide documentation in computer files, and in hardcopy, upon specific request. When appropriate (e.g., in a report rather than data listing), the contractor shall clearly specify the methods, procedures, considerations, assumptions, relevant citations, data sources, and data that support the results and any recommendations. The contractor also shall document alternative methods, procedures, and assumptions that the contractor considered in the statistical analysis. Further, the documentation shall be labeled with the name of the contractor and the EPA contract number. (For example, a memorandum explaining the results of a statistical analysis shall be placed on company letterhead).

The contractor shall ensure that documentation is created using, or easily converted to, Agency standard software formats (e.g., Microsoft Office) to facilitate EPA use and review.

Identification at Meetings (PWS C.6)

At meetings with EPA, the contractor shall state that he/she represents a contractor working for EPA, and wear clear identification identifying his contractor affiliation. Further, the contractor shall prepare briefing materials that clearly indicate that they have been provided by a contractor working for EPA. (See contract PWS section C.6)

Work plan

The contractor shall prepare a detailed work plan covering the tasks in this work assignment.

Quality Assurance Project Plan (QAPP)

QA Project Plan Requirements
EPA policy requires that an *approved* Quality Assurance Project Plan (QAPP) be in place before any work begins that involves the collection, generation, evaluation, analysis or use of environmental data. This work assignment is a continuation of work performed under Contract EP-C-10-023 WA 1-6 through 5-6 and a QAPP was already prepared and approved by EPA to support work performed to support this project (see "Quality Assurance Project Plan For the Steam Electric Rulemaking Statistical Support v1.0", dated 8/15/2011).

The contractor shall adhere to the previously approved QAPP and the contractor shall review the previously approved QAPP to verify that the QAPP adequately documents how quality assurance (QA) and quality control (QC) will be applied to all activities to be performed under this work assignment. As part of this review, the contractor shall also verify that existing QAPP content (e.g., organizational charts, roles and responsibilities, QA/QC procedures, checklists, SOPs, etc.) are still appropriate for the work to be performed under this work assignment for previously identified steps in the effluent guidelines process that will continue to be supported under this work assignment. Specifically, the contractor shall update the QAPP to address the calculation

of fundamentally different factors (FDF) variances, update the revision history page, and resubmit the QAPP for EPA approval.

If **minor** changes are needed to the existing QAPP, the contractor shall submit a revised QAPP to EPA within 10 days after submittal of the work plan. This revised QAPP shall include a version history page that summarizes the changes made. The contractor also shall provide EPA with copies of any modified SOPs or checklists. EPA will review the revised QAPP and provide the contractor with written approval or comments within 15 days of receiving the contractor's submission. The contractor shall revise the submitted QAPP within 7 days of receipt, unless otherwise instructed by the EPA WACOR.

If **major** changes are needed to the existing QAPP, the contractor shall submit a revised QAPP to EPA within 15 days after submittal of the work plan. When preparing this revised version, the contractor shall ensure that it is written in an active voice and shall include a version history page that summarizes changes made. The contractor also shall provide EPA with copies of any modified SOPs or checklists. EPA will review the revised QAPP and provide the contractor with written approval or comments within 15 days of receiving the contractor's submission. The contractor shall revise the submitted QAPP within 10 days of receipt, unless otherwise instructed by the EPA WACOR.

Under no circumstances shall work that involves the generation, collection, evaluation, analysis, or use of environmental data be performed without an approved QAPP in place 50 days after submission of the contractor's work plan.

Under no circumstances shall field sampling or laboratory analysis activities be conducted prior to receipt of an approved work plan.

Any non-sampling/non-analytical work that involves the generation, collection, evaluation, analysis, or use of environmental data that is initiated prior to approval of the contractor's QAPP must be performed in accordance with the approved QAPP. (The QAPP requirements must be applied retroactively to this period that lasts no more than 50 days from submission of the contractor's work plan.).

Data Quality Act/Information Quality Guidelines Requirements

The Data Quality Act (also known as the Information Quality Act) requires EPA to ensure that influential information disseminated by the Agency is sufficiently transparent in terms of data and methods of analysis that the information is capable of being substantially reproduced. To support compliance with these data transparency/data reproducibility requirements, EPA plans to include QAPPs as part of any rulemaking record documentation to be made available to the public. The contractor may claim information in QAPPs as confidential; if the contractor chooses to do so, the contractor shall submit a sanitized (i.e., public) version and an un-sanitized (i.e., confidential) version at the time the QAPP is submitted for approval by EPA. The sanitized version will be included in the public docket for the applicable rulemaking (or other docket or record), and the un-sanitized version will be included in a non-public (i.e., confidential) portion of the docket (or record).

Information contained in the approved QAPP must be transparent and reproducible and meet the requirements of the Data Quality Act for influential information. EPA's *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity, of Information Disseminated by the Environmental Protection Agency* (EPA/260R-02-008, October 2002), referred to as "EPA's Information Quality Guidelines," describe EPA procedures for meeting Data Quality Act requirements. Section 6.3 of EPA's Information Quality Guidelines indicate that "especially rigorous robustness checks" should be applied in circumstances where quality-related information cannot be disclosed due to confidentiality issues. Where applicable, the contractor should indicate which results were obtained using the tools (SOPs, checklists, and guidelines) that the contractor designates as confidential so that the EPA WACOR can easily identify the areas that will require rigorous robustness checks and document that those checks have been performed. At the discretion of the EPA WACOR, the contractor may be requested to prepare pre-dissemination review checklist as described in Section 5.5 of the Office of Water Quality Management Plan, February 2009. If this is required, the EPA WACOR will notify the contractor through written technical direction.

Additional QA Documentation Required

In addition to the QAPP requirements described above, all major deliverables (e.g., Technical Support Documents, Study Reports, Study Plans, etc.) produced by the contractor under this work assignment must include a discussion of the QA/QC activities that were or will be performed to support the deliverable. For example, a Technical Support Document or Study Report must include a clear discussion of the quality management strategies that were employed to control and document the quality of data generated and used.

The contractor also shall provide EPA with monthly reports of QA activities performed during implementation of this work assignment. These monthly QA reports shall identify QA activities performed to support implementation of this work assignment, problems encountered, deviations from the QAPP, and corrective actions taken. If desired, the contractor may include this as a part of the contract-required monthly financial/technical progress report.

Travel

This work assignment may require local travel. For work plan estimates, the contractor shall assume it may be required to attend two meetings at EPA Headquarters. Any non-local travel directly chargeable to this work assignment shall be submitted and approved by the Contract Level Contracting Officer's Representative prior to the travel.

Other Requirements

The contractor shall provide written notification to the contracting officer, contract level contracting officer's representative, and work assignment contracting officer's representative when 75 percent of the hours and/or funds have been spent on this work assignment.

C. Technical Support

The EPA WACOR will provide technical clarification/directives regarding the tasks of the work assignment listed below through written technical directives. In completing the said tasks, the contractor shall follow the general principles listed below:

- Data Quality: If any new data is provided to the contractor, the contractor shall evaluate the data quality and integrity. The contractor shall immediately notify the EPA of any deficiencies and/or concerns about the data quality, integrity, and completeness that require EPA resolution.
- Methodologies: The contractor shall provide memoranda describing and evaluating the appropriateness of various statistical methodologies for analyzing any new data provided by the EPA. With the results of the statistical analyses, the contractor shall provide memoranda that clearly specify the methods, procedures, assumptions, relevant citations, data sources, and data that support the results and recommendations. The contractor also will document alternative methods, procedures, and assumptions that the contractor considered in the statistical analysis. For all memoranda, the contractor will provide revisions that incorporate comments from the EPA.
- Programs and Databases: As directed by the EPA, the contractor shall provide summary statistics, percentile estimates, graphical analyses, diagnostic evaluations of estimates, and assessment of the variability of the data. The contractor will provide the statistical programs and databases upon request. The contractor also shall provide appropriate documentation that will show the relationship between the programs and databases (e.g., flowcharts).

Task 1: Litigation Support

The steam electric rule is under litigation by multiple parties and information filed with the Court of Appeals shows that the numeric effluent limitations, as well as the pollutant concentration data and statistical models/methodologies used to calculate the effluent limitations, are among the issues being challenged. The contractor shall support EPA in evaluating the litigation issues and developing responses. The technical support provided by the contractor shall include searches of documents and data included in the rulemaking record, reviewing comments submitted during the public comment period for the proposed rule (along with EPA's responses to the public comments), and statistical analysis of data related to the steam electric rule as directed by the EPA WACOR through written technical direction. The contractor shall also develop any additional documentation as directed by the EPA WACOR through written technical direction to defend the rule against legal challenges.

Task 2: FOIA Support

The contractor will support EPA in responding to Freedom of Information Act (FOIA) requests for records. The contractor will support EPA in researching existing documentation to identify potentially responsive records and compiling the responsive documents.

Task 3. General Statistical Support

As directed by written technical direction from the WACOR, the contractor shall perform statistical support related to the analysis of power plant data, including evaluating and characterizing pollutant concentrations in wastewater discharges from steam electric power plants. Activities under this task may include providing technical support to EPA in reviewing data related to industry requests for fundamentally different factors (FDF) variances from the effluent guidelines numeric limitations, and statistical analysis of data to calculate alternative effluent limitations. The data supporting activities under this task may include some or all, of the data that EPA used to develop the effluent limitations for the steam electric rule. In addition, EPA anticipates that certain activities, such as developing alternative effluent limitations for an FDF variance, may be based on new data provided by the EPA WACOR. It is expected that the contractor will continue to use and modify the computer programs developed for the steam electric rule.

D. Deliverables and Project Schedule

Task No.	Deliverable Description	Deliverable Date
0	Work Plan	15 days from receipt of Work Assignment
0	Revised QAPP	With Work Plan
0	QA Reports	With monthly progress reports
1	Record searches and memoranda evaluating issues raised in litigants' briefs	As specified by written technical direction[i]
2	Record Searches and compilation of potentially responsive records	As specified by written technical direction[ii]
3	General technical support as specified by written technical direction	As specified by written technical direction[iii]

[i] The U.S. Court of Appeals for the Fifth Circuit has not yet established the briefing schedule for the litigation of the steam electric rule. The deliverable date will be specified by written technical direction, as determined by the briefing schedule.

[ii] EAD anticipates that at least one FOIA request will be submitted which relates to the calculation of the limits

[iii] At least three power plants intend to submit requests for a variance based on fundamentally different factors.